



Launch Mission Execution Forecast

Mission: SpaceX Falcon 9 Starlink-L9

Issued: 24 Jun 2020 / 0830L (1230Z)

Valid: 25 Jun 2020 / 1634 – 1645L (2034 – 2045Z)



Forecast Discussion: The Atlantic ridge axis, currently located just to the south of the Spaceport, will push north as the day progresses tomorrow. Models have trended slightly faster with the northward movement of the surface ridge axis, which has trended the forecast in a favorable direction for the launch window tomorrow. The weakened offshore flow will allow the east coast sea breeze to push further west, focusing afternoon showers and storms more inland. However, mid to upper level winds will still be westerly, which could push isolated storms and their associated anvils back towards the coast. Therefore, the main concerns for the primary launch window are the Cumulus Cloud Rule, Anvil Cloud Rule, and Lightning Rule.

On Friday, the set up looks very similar to Thursday, with the Atlantic ridge axis setting up right over the region. Some afternoon showers and storms are still expected, but again will likely be farther inland. Because of this, the primary concerns for the backup launch window are the same.

Launch Day	Probability of Violating Weather Constraints					
	40%	Primary Concerns: Cumulus Cloud Rule, Anvil Cloud Rule, Lightning Rule				
	Weather Conditions				Additional Risk Criteria	
	Weather/Visibility: Iso T-Storms / 7 mi.	Clouds				Upper-Level Wind Shear: Low
	Temp/Humidity: 85°F / 70%	Type	Coverage	Base (ft)	Tops (ft)	Booster Recovery Weather: Low
24-Hour Delay	Liftoff Winds (200'): 160° 12 - 17 mph	Cumulus	Scattered	3,000	12,000	Solar Activity: Low
		Cirrostratus	Scattered	25,000	28,000	
	Probability of Violating Weather Constraints					
	40%	Primary Concerns: Cumulus Cloud Rule, Anvil Cloud Rule, Lightning Rule				
	Weather Conditions				Additional Risk Criteria	
	Weather/Visibility: Iso T-Storms / 7 mi.	Clouds				Upper-Level Wind Shear: Low
	Temp/Humidity: 84°F / 70%	Type	Coverage	Base (ft)	Tops (ft)	Booster Recovery Weather: Low
	Liftoff Winds (200'): 150° 10 - 15 mph	Cumulus	Scattered	3,000	10,000	Solar Activity: Low
		Cirrostratus	Scattered	25,000	28,000	
	Note: The Probability of Violation (POV) is the chance that a Lightning Launch Commit Criteria (LLCC) or certain user constraints (surface winds, precipitation, and temperatures, etc.) will be violated during the launch window. It does not take into account upper-level wind shear, booster recovery weather, and solar activity.					
Next Forecast Will Be Issued		25 Jun 2020				